PROGRAM CHARTER

FOR

POLAR SATELLITE ACQUISITION

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1. EXECUTIVE SUMMARY.

A mission of the National Oceanic Atmospheric Administration (NOAA) is to provide forecasts and warnings for the United States, its territories, and adjacent waters and ocean area for the protection of life and property, and the enhancement of the national economy. This mission requires a capability to acquire, process and disseminate environmental data on an extensive spatial range (global, regional and local) within a variety of time scales (minutes to days). These data include, but are not limited to: global imagery, cloud and precipitation parameters, atmospheric profiles of temperature, moisture, wind, aerosols, and ozone surface conditions concerning ice, snow and vegetation; ocean parameters of sea temperature, surface height, surface wind, color and state; solar and in-situ space environmental conditions.

The Polar Acquisition Program is a NOAA sub-goal program that consists of satellites and sensors designed for polar or low altitude orbits and the supporting ground systems that are under development or in acquisition. After delivery, integration, test and turn-over, these ground systems transfer to Satellite Services.

The Polar Acquisition Program consists of NOAA's Polar-orbiting Operational Environmental Satellites (POES) and the National Polar-orbiting Operational Environmental Satellite System (NPOESS). In addition it seeks to transition into operations selected NASA or other research satellites or sensors which support NOAA's operational mission requirements, e.g. climate sensors, ocean surface topography, ocean surface wind vectors ,and GPS radio occultation. POES is NOAA's current operational polar system which has one more satellite left in the series to be launched. The POES Program, initially designed and launched in the mid-1970s, is the follow-on to the family of polar satellites that have provided global coverage since 1960. The POES Program is also providing instruments to the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) under two international agreements for flight on three of their METOP satellites which will be launched between 2006 and 2015. NPOESS was mandated by Presidential directive to converge and replace the POES and the Department of Defense's Meteorological Satellite Program (DMSP).

NOAA, National Aeronautics and Space Administration (NASA), and Department of Defense (DoD) are team players in the NPOESS effort and have established a tri-agency, Integrated Program Office (IPO), to manage and develop the NPOESS. Later this decade, the IPO, will launch the first of a series of NPOESS spacecraft to provide global coverage with a data refresh rate of approximately four hours. A globally distributed ground system will deliver 95 percent of the data within 28 minutes from the time of on-orbit collection.

NOAA has joined with NASA, the French Space Agency (CNES) and EUMETSAT to transition satellite-based altimetry into operations with the Ocean Surface Topography Mission (OSTM). The OSTM Jason-2 satellite will be launched by NASA and CNES in 2008 and operated by NOAA and EUMETSAT. OSTM/Jason-2 will extend the recorded of consistent, high quality sea surface heights started by the Topex/Poseidon satellite in 1992 and Jason-1 in 2001. NOAA and EUMETAT will take the lead in continuing the OSTM with a Jason-3 satellite and follow-on systems.

NOAA's Polar Acquisition Satellite program falls under NOAA's Mission Support Goal and supports all four main goals in the NOAA Strategic Plan. The observation requirements dictate several different orbital platforms, each with unique instruments. The polar program represents both a continuation of existing NOAA systems and an upgrade to meet increased

requirements.

The POES and the NPOESS Program offices are located in Suitland, Maryland and Silver Spring, Maryland, respectively.

Additional information on POES and NPOESS can be found at the following URLs: POES: http://www.osd.noaa.gov/POES/; NPOESS: http://www.ipo.noaa.gov/ ; OSTM: http://www.osd.noaa.gov/OSTM

2. PROGRAM REQUIREMENTS

A. Requirements Drivers: The need for the polar satellite systems are driven by (See Appendix A for additional requirements drivers):

1) Executive Directives:

a) Presidential Decision Directive (PDD/NSTC-2, Convergence of US Polar-Orbiting Operational Environmental Satellite Systems, May 5, 1994: Directs the Department of Commerce (DOC), Department of Defense (DoD), and National Aeronautics and Space Administration (NASA) to establish the NPOESS program to reduce the cost of acquiring and operating polar-orbiting environmental satellite systems, while continuing to satisfy U.S. operational requirements for data from these systems. and assigns roles and responsibilities

b) Presidential Decision Directive, NSTC-8, National Space Policy, 1996: Defines NOAA's role as having the lead responsibility for managing Federal space-based civil operational Earth observations necessary to meet civil requirements. In this role, NOAA will acquire data, conduct research and analyses, and make required predictions about the Earth's environment; consolidate operational U.S. Government civil requirements for data products, and define and operate Earth observation systems in support of operational monitoring needs; and provide for the regulation and licensing of the operation of private sector remote sensing systems. The Polar Program acquires and provides data in support of monitoring needs.

c) Presidential Decision Directive/NSPD15 (2003) -- U.S. Commercial Remote Sensing Space Policy: The policy's fundamental goal is to "advance and protect U.S. national security and foreign policy interests by maintaining the nation's leadership in remote sensing space activities, and by sustaining and enhancing the U.S. remote sensing industry." The Polar Program provides the fundamental US capability for global environmental monitoring. The sensors on the NPOESS and JASON, plus the suggested alternatives, are at the state-of-the-art in remote sensing and definitely "…by sustaining and enhancing the US remote sensing industry."

d) Presidential Decision Directive-63 - Critical Infrastructure Protection: Critical infrastructures are those physical and cyber-based systems essential to the minimum operations of the economy and government. They include, but are not limited to, telecommunications, energy, banking and finance, transportation, water systems and emergency services, both governmental and private. The Polar Program currently has a backup capability via ground stations in Alaska and Virginia. The NPOESS program increases the robustness of this system by having a worldwide data acquisition system that requires multiple (>5) failures to impact mission performance, provides for two separate command and control paths for the satellite, and provides for 60 days of autonomous operations. Additionally, NPOESS provides four complete data processing hardware suites, each of which can do the full NPOESS processing job. These are directly applicable to the JASON and alternative packages.

2) Legislative and Directive Documents:

a) Land Remote Sensing Policy Act of 1992, 15 U.S.C. §§ 5601 – 5672 at Subchapter

VI, §§ 5671 -5672 - Prohibition of Commercialization of Weather Satellites.

b) Prohibition on disposition of satellite facilities, Pub. L No. 98-8, Title I, § 104, 97 Stat. 34 (Mar. 24, 1983) (15 U.S.C. § 313 note).

c) Inland Flood Forecasting and Warning System Act of 2002, 15 U.S.C. § 313c - Authorizes NOAA through research, modeling, training, and outreach to enhance the capability to accurately forecast inland flooding, including flooding caused by coastal and ocean storms.

d) National Weather Service Organic Act, 15 U.S.C. § 313: “Secretary of Commerce shall have charge of forecasting of weather, the issuance of storm warnings, and display of weather and flood signals for the benefit of agriculture, commerce, and navigation”

e) Meteorological Services to Support Aviation, 49 U.S.C. § 44720: “The Administrator of the Federal Aviation Administration shall make recommendations to the Secretary of Commerce on providing meteorological services necessary for the safe and efficient movement of aircraft in air commerce. In providing the services, the Secretary shall cooperate with the Administrator and give complete consideration to those recommendations”.

f) Ocean Satellite Data (33 USC. Section § 883j) states that the NOAA Administrator shall take such actions, including the sponsorship of applied research, as may be necessary to assure the future availability and usefulness of ocean satellite data to the maritime community. The polar systems of POES, NPOESS and JASON provide data on ocean conditions worldwide that is not available from any other source.

g) Harmful Algal Bloom and Hypoxia Research and Control Act of 1998, Pub. L. No. 105-383, Title VI, 112 Stat. 3447 (Nov 13, 1998) (16 U.S.C. § 1451 note). The Harmful Algal Bloom and Hypoxia Act authorized DOC to conduct research, education, and monitoring activities related to prevention, reduction, and control of harmful algal blooms and hypoxia. The NPOESS system will provide data to monitor and support research of algal bloom and hypoxia conditions.

h) Coral Reef Conservation Act, 16 U.S.C. §§ 6401- 6409. The act is intended to restore coral reef ecosystems, promote wise management, develop sound scientific information, assist others in preserving reefs, provide financial resources, and provide a mechanism for funneling private funds to coral reef conservation projects. The Polar Program will provide worldwide operational monitoring of events such as coral bleaching. Enhancements in NPOESS over present systems improve this capability.

i) Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1801 et seq. The Congress finds and declares the following: (8) The collection of reliable data is essential to the effective conservation, management, and scientific understanding of the fishery resources of the United States. (9) One of the greatest long-term threats to the viability of commercial and recreational fisheries is the continuing loss of marine, estuarine, and other aquatic habitats. Habitat considerations should receive increased attention for the conservation and management of fishery resources of the United States. It is further declared to be the policy of the Congress in this chapter -- (3) to assure that the national fishery conservation and management program utilizes and is based upon, the best scientific information available; involves, and is responsive to the needs of, interested and affected States and citizens; considers efficiency; draws upon Federal, State, and academic capabilities in carrying out research, administration, management, and enforcement; considers the effects of fishing on immature fish and encourages development of practical measures that minimize by-catch and

avoid unnecessary waste of fish… The Polar Program provides broad area coverage of ocean, sea, near-shore and lake attributes which affect fisheries conservation and management. This is especially true for the Bering Sea/Gulf of Alaska.

3) Interagency and International Agreements

a) The International Search and Rescue Satellite System (COMPAS-SARSAT), which uses satellites in low-Earth and geostationary orbits to detect and locate aviators, mariners and land-based users in distress.

B. Mission Requirements:

The Polar Satellite mission requirements are:

1) Provide a continuous polar-orbiting remote-sensing capability for civilian and military users and achieve National Performance Review (NPR) savings.

a) Links to all Drivers but primarily Executive Directives 1 and 2.

2) Provide continuous relay of environmental data to distributed users and relay of distress signals from aircraft and marine vessels to search and rescue ground stations.

a) Links to Executive Driver 5.

The primary NPOESS mission requirement is “Provide a continuous polar-orbiting remote-sensing capability for civilian and military users and achieve National Performance Review (NPR) savings”. This mission requirement was initiated by the Presidential Directive (Executive Directives 1 and 2 above) to converge the current civilian and DoD Polar-Orbiting Operational Environmental Satellite Systems into one system as a joint program comprised of DOC, DoD, and NASA, that achieves National Performance Review (NPR) savings. Executive Directive 4 above drove the ground stations configuration and robustness. Legislative and Directive Documents 1 through 9 above were the driving force to determine what environment data products would be provided by polar satellites.

3. LINKS TO THE NOAA STRATEGIC PLAN

The Polar series of satellites provides data and products that support all of NOAA's Strategic mission goals to:

- Protect, restore, and manage the Use of Coastal and Ocean Resources Through an Ecosystem Approach to Management
  - Polar satellite capabilities are well suited for providing high resolution data for environmental impacts from chaotic processes like fires, water temperatures, storms and volcanic ash, which play a large part in the earth's environment. The environmental data is used in real time forecasts and warnings and to support climate research to determine protective measures required for ecosystems.
- Understand Climate Variability And Change to Enhance Society's Ability to Plan and Respond
  - Polar satellites provide quantitative environmental data such as temperature, moisture, wind, radiation and solar energy particle flux for use in climate prediction and analysis. Polar satellite data provide a secondary source of information in the Nation's Climate Reference Network, providing reference quality data for surface temperature and precipitation monitoring. Data and information from polar satellites are used along with other climate-related observing system data to construct the most reliable records possible regarding local, regional, national, and global climate variability and change. Since even small climate variations can have significant consequence, the polar satellites must have: minimal orbital drift, satellite, pre-launch and on-orbit instrument characterization calibration, long term instrument variance stability, product

reprocessing, access to products and in-situ observations.

- Serve Society's Needs For Weather And Water Information
  - The real-time weather data gathered by polar satellites, provides the key data for initializing numerical models and combined with data from other observing systems allows weather forecasters to provide early warnings of thunderstorms, winter storms, flash floods, hurricanes, and other severe weather. This data has resulted in major improvements in the ability of forecasters to more accurately track and analyze severe weather events and reduce loss of life and property.
- Support The Nation's Commerce with Information for Safe, Efficient, And Environmentally Sound Transportation
  - Polar satellites are essential for safe and efficient transportation and commerce systems, which are crucial to the economic health and public safety of the Nation. Data from these satellites provide a key element in the development of short and long-term forecasts allowing commerce on land, sea, and air to be redirected out of harm's way.

A. Goal Outcome: The Polar Satellite Programs support the Mission Support outcome, "Ship, aircraft, and satellite programs that ensure continuous observation of critical environmental conditions."

B. Goal Performance Objective: The Polar Satellite Programs support the Mission Support performance objective, "Increase quantity, quality, and accuracy of satellite data that are processed and distributed within targeted time."

C. Goal Strategy: The Programs employ the Mission Support strategy "Provide timely and effective acquisition and delivery of satellite-derived information that supports requirements from the Mission Goals."

4. PROGRAM OUTCOMES

A. Polar-orbiting Satellites that ensure Continuous Global coverage assuring better, quicker, and more valuable weather and water information to support improved decisions for civil and military leaders.

B. Reduced cost of acquiring and operating polar-orbiting environmental satellite systems, while continuing to satisfy US operational requirements for data from these systems.

5. PROGRAM ROLES AND RESPONSIBILITIES

This program is established and managed with the procedures established in the NOAA Business Operations Manual (BOM). Responsibilities of the Program Manager are described in the BOM. Responsibilities of other major participants are summarized below:

A. Participating Line Offices Responsibilities:

1) National Environmental Satellite, Data and Information Service (NESDIS) provides the program manager and personnel for the POES program and the program manager and NOAA staff to tri-agency IPO. Additional, staff is provided by DoD and NASA to support NPOESS.

2) The NOAA Office of General Counsel (GC) is responsible for providing legal services necessary to enable the program to discharge its duties.

B. External Agency/Organization Responsibilities:

1) DoD is a voting member of the NPOESS EXCOM and provides half the funding and staff for NPOESS.

2) NASA is a voting member of the NPOESS EXCOM and provides technology transfer, information, and staff for NPOESS.

3) NASA, under an interagency agreement, is responsible for the acquisition of the POES satellites with delivery on orbit and the instruments for flight on the METOP satellites.

4) International Partners

a) Search and Rescue Satellite-Aided Tracking (SARSAT) sensors will be provided as Government Furnished Equipment by both France's Centre National d'Etudes Spatiales (CNES) and Canada's Department of National Defence (DND).

b) Advanced Data Collection System (ADCS) sensor will be provided as Government Furnished Equipment by France's CNES.

c) POES and NPOESS will use the METOP which represents Europe's contribution to a new cooperative venture which will secure this weather data service. METOP is being developed by EUMETSAT and the European Space Agency (ESA) and the METOP ground system will be provided by EUMETSAT.

d) NOAA and EUMETSAT will operate the OSTM/Jason-2 altimetry satellite developed and launched by NASA and CNES.

6. END USERS OR BENEFICIARIES OF PROGRAM:

End users of POES and NPOESS provided data will benefit from these data by developing, receiving, and/or utilizing the following derived products: benefit severe storm and flood warnings, tropical cyclone (hurricane reconnaissance and warnings, hydrologic forecasts, forecasts of the ocean surface and internal structures, medium range forecast outlook, (out to fifteen days), solar and space environmental forecasts, aviation forecasts (domestic, military, and international), forecasts of ice conditions, and seasonal, inter-annual and decadal climate forecasts. The list of polar satellite program data end users is quite extensive and they are listed below:

A. Governmental end users include:

1) Coastal Zone Managers

2) Coastal, Ocean, Great Lakes Resource Managers

3) Department of Commerce

4) Department of Defense

5) Department of Homeland Security

6) Emergency Managers

7) Fire Managers

8) Fisheries Scientists

9) Fishery Management Councils

10) Members of Congress

11) NOAA Climate Program

12) NOAA Employees

13) NOAA Managers

14) NOAA Mission Goal Teams

15) NOAA Programs

16) Other Federal Agencies – General

17) Public Health Officials

18) Sea Grant Extension
19) State Agencies
20) State and Local Governments
21) U.S. Geological Survey (USGS)
22) U.S. Intelligence Community

B. Non-Governmental end users include -

1) Academia
2) Agricultural Extension
3) Airline Industry
4) All sectors of the economy
5) Aquaculture Industry
6) Coastal Communities
7) Coastal Tourists
8) Commercial Fishermen and Recreational Anglers
9) Commercial Industry
10) Commercial Remote Sensing Satellite Industry
11) Companies that add value to NOAA Products
12) Divers
13) Electrical Power Industry
14) General Public
15) International Organizations
16) International Partners
17) NOAA Contractors
18) Ocean and Coastal Resource-based Businesses
19) Recreational Industry
20) Seafood Industry
21) Space Weather Vendors
22) Student and Teachers
23) Transportation Managers
24) Users of Ocean and Coastal Zone

APPENDIX A:

ADDITIONAL REQUIREMENT DRIVERS

Requirements Documents:

The U.S. Government (USG), Department of Commerce's (DOC) NOAA has as its primary environmental mission to provide forecasts and warnings for the United States, its territories, adjacent waters and ocean area, for the protection of life and property and the enhancement of the national economy. This mission requires an enduring capability to acquire, process and disseminate to central processing centers and distributed direct users, environmental data on an extensive spatial range (global, regional and local) within a variety of time scales (minutes to days). These data include, but are not limited to: global imagery; cloud and precipitation parameters; atmospheric profiles of temperature, moisture, wind, aerosols and ozone; surface conditions concerning ice, snow and vegetation; ocean parameters of sea temperature, color and state; solar and in-situ space environment conditions. These data are critically needed for:

- severe storm and flood warnings;
- tropical cyclone (hurricane reconnaissance and warnings);
- hydrologic forecasts;
- forecasts of the ocean surface and internal structures;
- medium range forecast outlook (out to fifteen days);
- solar and space environmental forecasts;
- aviation forecasts (domestic, military, and international);
- forecasts of ice conditions;
- seasonal and inter-annual climate forecasts;
- decadal-scale monitoring of climate variability;
- assessment of long-term global environmental change;
- environmental air quality monitoring and emergency response;
- detection and analysis of fires and volcanic eruptions; and
- short-term and mesoscale forecasts.

To effectively meet the polar requirements, a complete End-to-End system must be developed – currently, the POES satellite has been developed as a series of individual projects that result in an end-to-end system. The NPOESS program is being developed as a complete program, but not an end-to-end system. NPOESS requires improvements in data utilization, called the NPOESS Data Exploitation (NDE) system and in archiving (called CLASS) to achieve end-to-end performance. NPOESS sensor upgrades and JASON-2, although limited projects, will fit within existing end-to-end systems. The mandates that support the NOAA polar programs in addition to those described in Section 2 of this document including International Treaties, Inter-Agency Agreements, and other agreements and approved documents.

Memorandum of Agreement Between the Department of Commerce, Department of Defense, National Aeronautics and Space Administration for the National Polar-orbiting Operational Environmental Satellite System (NPOESS), May 26, 1995. This MOA implements the Presidential Direction (PDD/NSTC-2) to establish NPOESS.

Integrated Operational Requirements Document (IORD) II, December 10, 2001, National Polar-orbiting Operational Environmental Satellite System (NPOESS), ACAT Level 1D, signed by the Deputy Under Secretary of Commerce for Oceans and Atmosphere, NASA Associate

Administrator for Earth Science, and Vice Chairman of the Joint Chiefs of Staff. The IORD establishes the detailed performance requirements for NPOESS, including the environmental data records for the basic program and the alternative packages.

National Polar-orbiting Operational Environmental Satellite System (NPOESS) Single Acquisition Management Plan (SAMP), June 7, 2002. Signed by the NOAA Administrator, the Undersecretary of the Air Force and the NASA Associate Deputy Administrator. The SAMP establishes the "rules" for the way in which NPOESS will be acquired and operated.

National Polar-orbiting Operational Environmental Satellite System (NPOESS) Acquisition Decision Memorandum (ADM), June 2006. DOD, DAC and NASA agreed to the restructured NPOESS program for the purpose of complying with section 2433 of title 10, United States Code ("Unit Cost Reports").

Basic Agreement Between the National Aeronautics and Space Administration and the U.S. Department of Commerce Concerning Collaborative Programs, 1998: Defines principles and guidelines in areas related to environmental satellite programs, specifically including those activities related to the development of space-based capabilities (both the development of new instrumentation and flight opportunities and enhancements to existing systems), and data and information systems, the coordination of research and analysis activities and other areas of collaboration. POES was collaboratively developed and acquired by NOAA and NASA. NASA is a participant in NPOESS. NASA will be the lead agency developing the wind LIDAR. NASA and NOAA will work cooperatively on the development of JASON-2 and its transfer to operations.

Office of the Federal Coordinator for Meteorology (OFCM) operations plans: The Polar Program provides and will continue to provide data and services in support of OFCM plans. Satellite data products and services support the operational plans listed below by providing timely, accurate, and relevant satellite data at all hours of the day and night, providing effective perspectives of the situation from which efficient decision-making can occur.

National Severe Local Storms Operations Plan B May 2001

National Winter Storm Operations Plan B November 2000

National Hurricane Operations Plan B May 2003

Federal Plan for Meteorological Services and Supporting Research B June 2002

Environmental Support Plan for Homeland Security B under development

The Federal Emergency Management Agency's (FEMA) Federal Response Plan (FRP) April 1999, The Plan implements the Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (42 U.S.C. 5121, et seq.) The FRP tasks the Department of Commerce (DOC) with acquiring and disseminating weather data, forecasts, and emergency information, providing information on natural resources, predicting pollution movement, and providing information on meteorological, hydrological, ice, and oceanographic conditions. The POES and NPOESS systems will provide meteorological and environmental data to FEMA for its independent use.

Interagency Agreement for Meteorological Services Among the Bureau of Land Management, Bureau of Indian Affairs, U.S. Fish and Wildlife Service, National Park Service of the United States Department of the Interior, the Forest Service of the United States Department of Agriculture, and the National Weather Service of the United States Department of Commerce. POES and NPOESS data, products, and services will support park services, forest services, land management, and wildlife management by continuing to provide fire, smoke, ash and other satellite-derived products and services enabling other key agencies to more efficiently perform their charged functions. The proposed wind LIDAR directly supports wind measurements essential for wind driven fire and ash.

North America-Europe Data Exchange Agreement - The North America-Europe Data Exchange seeks to maintain and improve the exchange of meteorological data and products between Europe and North America, for use in operational weather forecasting and related activities. All polar program data will be exchanged under this agreement.

Interagency Cooperation, e.g. with the U.S. Army Corps of Engineers, U.S. Department of Interior, U.S. Department of Agriculture, U.S. Bureau of Reclamation; and the National Aeronautics and Space Administration assigns NOAA the responsibility for collecting climate, weather, and snow data and providing river level and flood forecasts and flash-flood warnings. The Polar Program will provide satellite-derived observations required to support monitoring and forecasting responsibilities under this agreement. This is especially critical for Alaska.

Agreement Between the United States National Oceanic and Atmospheric Administration and the European Organisation (European spelling) for the Exploitation of Meteorological Satellites on An Initial Joint Polar-orbiting Operational Satellite System, Nov 19, 1998. This is the basic agreement between the United States and EUMETSAT to cooperate on POES-N, N' and METOP-1, 2. Includes instrument sharing, command and control sharing and data processing, ensures free and open data exchange between the two partners. An annex ensures encryption and data denial capabilities and mechanisms for data denial are in place.

Agreement Between the United States National Oceanic and Atmospheric Administration (NOAA) and the European Organisation for the Exploitation of Meteorological Satellites (EUMETSAT) on Joint Transition Activities Regarding Polar-orbiting Operational Environmental Satellite Systems, June 24, 2003, Extends the IJPS agreement to METOP-3 and integrates NPOESS into the architecture. Commits NOAA to using the European IASI in the mid-morning orbit (means the US will not fly an IR or microwave sounding senor on NPOESS in that ascending node time, but per agreement with the DoD, will retain the capability).

Letters between NOAA and other agencies concerning continuation of Ocean Surface Topography (JASON) Commitment to a joint development of a follow-on Ocean Surface Topography Mission, subject to availability of funds.

- Letter, Vice Admiral Lautenbacher, Under Secretary of Commerce for Oceans and Atmosphere to Sir David King, Chief Scientific Advisor, Office of Science and Technology, Jan 16, 2003
- Letter, Vice Admiral Lautenbacher, Under Secretary of Commerce for Oceans and Atmosphere to Dr Claudie Haignere, Minister of Research and New Technology, France, Mar 7, 2003
- Letter, Gregory Withee, Assistant Administrator for Satellite and Information Services, NOAA, to Dr Peter Ewins, Director Chief Executive, Met Office Customer Center, May 28, 2003 – Discusses US Navy interest
- Letter, Gregory Withee, Assistant Administrator for Satellite and Information Services, NOAA, to Dr Tillman Mohr, Director General of EUMETSAT, Sep 17, 2003
- Letter, Gregory Withee, Assistant Administrator for Satellite and Information Services, NOAA, to Mr Yannick d'Escatha, President, Centre national d'Etudes Spatiales, France, Sep 29, 2003

Memorandum of Understanding Among the National Aeronautics and Space Administration and the National Oceanic and Atmospheric Administration Jointly and the Centre National D'Etudes Spatiales and the European Organisation for the Exploitation of Meteorological Satellites for Cooperation in the Ocean Surface Topography Mission, March 2006. This agreement details the roles and responsibilities of the parties for the development, launch and operation of the Jason-2 altimetry satellite.